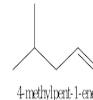
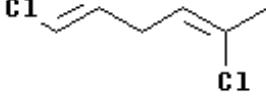


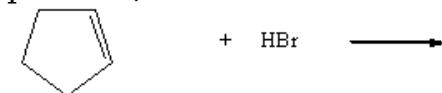
Assignment 3: Alkenes

1. Draw the structure or give the name of the structure of the below alkenes compounds according to the IUPAC, cis/trans or E/Z.

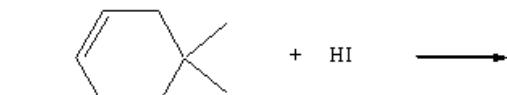
	 2-methylpent-1-ene	 4-methylpent-1-ene
$\begin{array}{c} \text{HOCH}_2\text{CH}_2 \\ \\ \text{C}=\text{C} \\ \\ (\text{H}_3\text{C})_2\text{HC} \quad \text{Br} \\ \\ \text{CH}=\text{CH}_2 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ \text{CH}_3-\text{CH}-\text{CH}=\text{C}-\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	
$\begin{array}{c} \text{CH}_3\text{CH}_2 \\ \\ \text{C}=\text{C} \\ \\ \text{H} \quad \text{H} \\ \\ \text{CH}_2\text{CH}_3 \end{array}$		 Cl Cl
1. (E)-3-isopropylhex-2-ene 2. 2-ethyl-1-hexene 3. Trans-2,4-dimethyl-3-hexene 4. 2-methyl-cyclopentene 5. 4-ethyl-3-propenyl-1,3-cyclohexadiene 6. 1,2,3-trichloro-1-pentene		

2. The rule of Markovnikov states that:

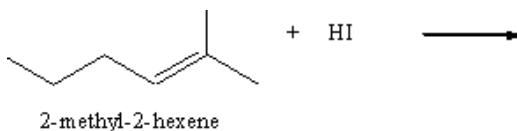
3. Complete the following reactions and write the name for the product, state all if there are more than one product.



cyclopentene



4,4-dimethylcyclohexene



2-methyl-2-hexene

3. Draw the mechanism steps for the dehydration of the below compound. Specify & name the major and minor products.

